SPECIAL CASES, ILLUSTRATING THE VALUE OF THE MICROSCOPE IN THE EXAMINATION OF LEGAL DOCUMENTS

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In Volume XI of the *Proceedings* of this Society, page 102, I presented a paper, entitled Examination of Legal Documents with the Microscope—Qualifications of Examiner. In this paper, I tersely discussed, "The characteristics of the paper"; "The ink used in writing"; "The strokes of the pen"; "The point of the pen"; "Erasures,—chemical and mechanical"; "Value of different colored light in examination," and "Photography as an aid in investigations of this character," etc. I then gave five different points in the qualifications of an examiner, *viz.*: first, "knowledge of the use of the microscope"; second, "perseverance"; third, "honesty"; fourth, "ability to answer the reasonable cross-examiner"; fifth, "the tact to combine the practical with the scientific, and secure the payment of a satisfactory fee for his services." In that paper, I stated in conclusion, that I intended in the future to give details of cases mentioned in the paper, when their practical value would be demonstrated.

I desire to state, before proceeding with the subject, that the result of investigation of handwriting with the microscope is very different from that attained by the (so-called) "experts in handwriting," whose methods of investigation have resulted in relegating this class of (so-called) experts to the background, where they deserve to be.

In investigations of this character, you must have facts upon which to ground your opinions,—facts, that will appeal to the judge and jury and can be made clear to them. I can best illustrate this by recalling the methods utilized in a case, H. *vs.* W., Warren, Pa. A certain signature was adjudged a forgery by the plaintiff; denied by the defendant; I had considerable writing of the defendant and eighty to one hundred genuine signatures of the gentleman whose signature was forged to base my examination upon. The indivi-

dual who was supposed to have forged the signature in his writing was accustomed to make a dash under his signatures; this was not observed in the genuine signatures: all of the genuine signatures of about the same period of time of the making of the forged document exhibited a greater irregularity,—more tremor in the strokes, or a nervousness of the writer,—than in the supposed forged signature: the capital letter " H " of the supposed forged signature was much larger than in the genuine signatures and an erasure to shorten one of the strokes of the " H " had been made to make it correspond to the genuine signature: in regard to the termination of a letter " n " of the forged signature, there were but three or four out of eighty-two genuine signatures which showed a similar termination to the forged signature: in seventy-two genuine signatures, there were other features of difference, eight of which required the microscope to show the differences between the genuine and the forged signature while a low-power hand magnifier demonstrated the features of difference in the others: connection between the letter " H " and the rest of the word existed in the supposed forged signature and did not show in the genuine signatures: and so on. These differences were so marked and of so great a number that the microscope was used to demonstrate the truthfulness of many of these points to the jury; what appeared to be the right issue prevailed in this case.

In another case, at Salamanca, N. Y., an expert from Troy, N. Y., claimed that a certain signature was a forgery, and had but two genuine signatures for comparison. How an opinion of value could be formed, I do not see. Such testimony would, naturally, call for condemnation on the part of the jurist. Upon the presentation of, and comparison with a large number of genuine signatures, I was enabled to clearly indicate the genuineness of this signature.

While the microscope was very useful and almost indispensable to a correct solving of the questions presented in the previous cases, I now give one where it was indispensable and where a power of seventy-five to one hundred diameters was valuable. The owner of a large estate died leaving a family, one son acting as administrator. This son owed the estate a large sum of money, but when the question of settlements arrived, this indebtedness did not appear to exist; a bond which covered a portion of the debt indicated, from the endorsements upon it, that it had been paid; three notes given by this

son and signed by the testator were also presented as evidence of payments. I began my investigations by making comparisons between the writings of the testator and that of the questionable endorsements and notes, and determined that the signatures and endorsements were not made by the testator. This, however, was not quite satisfactory to my mind; I was given a letter written by the son about the date of the making of the notes and endorsements and soon found, only by the microscopic appearances, that the three endorsements, signatures, and three notes with signatures were made by the same individual. I presented, as my opinion, that the notes, the endorsements and the letter of approximate date were written by the same individual; that the ink used was similar; the same pen, or one of similar make, was utilized; and that all the writings in question were made at or about the same time. The case came up in a surrogate's office; when presented with my evidence, the guilty party fell upon his knees, acknowledged the truth of my assertions, and begged piteously not to be prosecuted. Full reparation was made, the documents destroyed, and all matters quietly settled. The writings of the forged documents in this instance presented peculiarities in the clean cut distinction of the nib strokes throughout the writing, and in the uniformity and even distribution of the ink between the nib stroke outlines in the three endorsements, the note, and the letter written by the individual who made the forgeries. A power of one hundred diameters gave the best results in this examination. The pen used was a fine one and the strokes and nib outlines required this magnification to clearly distinguish these characteristic features. The case was settled so quickly that I was unable to obtain photographs showing the exceptional peculiarity of this interesting bit of chirography.

The following case was one of extreme interest from many points of view. In my fifth qualification for an examiner, in the paper referred to, I say "another qualification of practical import to the examiner is to obtain your fee before you do your work, or make a satisfactory arrangement to secure it. There is no class of expert work entitled to a higher fee than this under consideration. The attorneys will, as a general thing, look out for their fee, and often give the expert who has aided them little consideration." Later on it will be seen that I failed in this particular qualification, but that the attorneys did not fail in their part.

The following is a copy of a will, placed on probate in the surrogate's office, Erie county, N. Y.:

Will of Peter Rohe

In the name of God, Amen. I, Peter Rohe, of the City of Buffalo and State of New York, of the age of seventy-one years, and being of sound mind and memory, do make, publish and declare this, my last Will and Testament, in manner following, that is to say, I give, devise and bequeath to my niece, Margaret Rohe, wife of Philip Goetzman, the sum of ten thousand dollars.

Second,—I give, devise and bequeath to my wife, Mary Elizabeth Rohe, all the rest, residue and remainder of estate, both real and personal, of any name, virtue or kind whatsoever, that I may die possessed of, wherever the same may be situated, and I do hereby appoint my said wife, Mary Elizabeth Rohe, executrix, and my friend, Martin J. Nieman, to be executor of my last Will and Testament, with power to sell, convey, discharge, etc.

In witness whereof, I have hereunto set my hand and seal the 20th day of June, 1887.

(Signed) PETER ROHE.

The above instrument, consisting of one sheet, was at the date thereof signed, sealed and declared by the said Peter Rohe as and for his last Will and Testament, in presence of us, who, at his request and in his presence, and in the presence of each other, have subscribed our names as witnesses thereto.

(Signed) JOHN ECKHERT
resides at Buffalo, in Erie Co., State of New York.

(Signed) WILLIAM J. NIEMAN
resides at Buffalo, in Erie Co., State of New York.

This will was filed in the surrogate's office of Erie county.

Then began a contest, based upon the following aspect of the case as reported to me by Mrs. Goetzman, *nee* Margaret Rohe:

Her father and her uncle, Peter Rohe, came to this country from Germany, settled in the neighborhood of Buffalo, and purchased farm land which ultimately became a part of the city and quite valuable. Peter Rohe had no children; Margaret Rohe's father died, so that she, as his heiress, was entitled to one-half of the

estate of her father and Peter Rohe. On the death of Peter Rohe, his will gave her, now Mrs. Goetzman, but $10,000, when she claimed that she was entitled to one-half the estate, which was valued at about $100,000. She brought suit in surrogate's office, employing as her attorneys, Judge H——— and W. C. B———. The proceedings were at a point where she was uncertain as to whether she might not lose the amount given in the will. At this stage, Attorney B——— called upon me and stated that he had discovered evidence of an erasure in one of the signatures of the will, and would have his client employ me to discover its import.

Examination revealed that a signature had been erased with a knife; the erasure was well done, but not so completely as to evade careful investigation. However, with lamplight, kerosene flame or with gas light, the ink of the erased signature, being in small particles of a brownish and yellow hue could not be seen. I, then, utilized the blue light of the sky and found, to my gratification, the small particles of the ink of the original signature could be made out; to connect them, however, without making a systematic drawing was out of the question. With a one inch objective and a one inch ocular, I made a series of magnified off-hand drawings on ordinary letter size paper, numbering the sheets in succession, and also included the full signature, Wm. J. Nieman, in this series of drawings, which enabled me to assemble the various sheets after their completion. On pasting the sheets together, the name Martin J. Nieman stood out plain and clear; this name had first been written, and, for some reason, erased, and the name Wm. J. Nieman then written. The supposition is that the former, who was one of the executors of the will, had signed as a witness: this being considered illegal, the erasure was then made and the name Wm. J. Nieman written. While there may have been no intention of fraud nor desire to do any wrong in this case, yet, through this action, the document was made, legally, a forgery.

The outcome of the case was so interesting and so great a modification of the terms of the document that it indicates there was something suspicious in the procedure. When I called upon Mrs. Goetzman and requested recompense for my service, she informed me that her attorneys had taken so large a portion of the estate that it would be difficult to pay the amount I considered a fair recompense. She then showed me a receipt signed by her attorneys

for $14,593, and some cents, which had been paid the attorneys in cash. She stated that they had informed her after having been made acquainted with the result of my work, but without notifying her of its import, that she need not worry about any uncertainty in receiving the $10,000 named in the will and that they were quite willing to accept one-third of all above this amount as their recompense. In the belief that the $10,000, given in the will might be jeopardized she readily acquiesced and an agreement was made out to this effect. The estate was about equally divided between the widow of Peter Rohe and his niece, and she received $43,560, and over, more than she expected, less one-third paid to her attorneys.*

In all these cases, I desire to state that the results obtained depended upon the examination with the compound microscope. That work of this character is entirely different from the work of the ordinary (so-called) expert in the examination of handwriting, the results quite as different, and, from every standpoint, eminently more satisfactory.

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* Mrs. Goetzman brought suit to recover a portion of the excessive fee obtained by her former attorneys. The matter was compromised by they paying her $500, out of which she paid her attorney in this suit and my fee, amounting to some $344. Mrs. Goetzman's attorneys, as also the attorney of the widow Rohe, admitted that it was the work with the microscope that decided the case. The former mentioned $150 as a fair compensation for my services (they received $14,593!), the latter said it should have been $5,000.